

(Exhaust) valve of internal combustion engine - made at least completion of intermetallic phases of nickel and aluminium

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Abstract of DE3935496

Valve, partic. exhaust valve, of internal combustion engine is made in part or completely of intermetallic phases of Ni and Al, partic. Ni3Al or NiAl. Use of NiAl gives increased resistance to corrosion compared with Ni3Al, while being lighter. B can be added to increase ductility at room temp. and facilitate processing, partic. in one piece. Alternatively the valve head can be mfd. and friction or electron-beam welded to a stem.

ADVANTAGE - High hot strength and fatigue resistance, low cost of mfr.

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